

ABSTRACT

An adaptive antenna receiver whose follow-up performance is improved with respect to the angle change of the arrival direction of a desired signal. An antenna weight adaptive update section (11-1) adaptively updates the antenna weight according to a signals received by each antenna element and an error signal obtained from a desired signal corrected based on transmission channel estimation. An antenna weight direction constraint section (12-1) performs the constraint process for the antenna weight obtained by the antenna weight adaptive update section (11-1) to maintain the beam gain constant in the arrival direction of the desired signal. A beamformer (2-1) receives the desired signal through an array antenna using the antenna weight which has undergone the constraint process performed by the antenna weight direction constraint section (12-1). A transmission channel estimation section (3-1) estimates the transmission channel of the desired signal received by the beamformer (2-1) to correct the desired signal based on the estimation result.